Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

1-26.   (Cancelled)

27. (Currently Amended)   A method of managing a state memory adapted for storing state information applicable in a message communication between communications units in a communications system, the method implemented by a first communication unit and a second communication unit comprising the steps of:

-     defining at the first communication unit at least two message classes of the messages communicated between said communications units the first communication unit and the second communication unit; and

-     dividing said state memory in the first communication unit into at least two memory portions, each memory portion being assigned for storing state information associated with a specific message class;

- and in that said state memory is arranged in [[a]] the first communication unit and is allocated for storing state information used in message communication with [[a]] the second communications unit.

- and in that said second communications unit requesting said first communications unit to allocate state memory space utilized for storing said state information used in said message communication with said second communications unit.

28. (Previously Presented)   The method according to claim 27, wherein said defining step comprises defining said at least two message classes based on at least one of:

-     a priority type of said communications messages;

-     an application protocol used when generating said communications messages; and

-     a session type associated with communications messages.

29. (Previously Presented) The method according to claim 27, wherein said dividing step comprises allocating an equal memory size to said at least two memory portions.

30. (Previously Presented) The method according to any of the claims 27, wherein said dividing step comprises allocating a first memory size to a first memory portion and a second different memory size to a second memory portion based on a first message class associated with said first memory portion and a second message class associated with said second memory portion.

31. (Previously Presented) The method according to claim 27, further comprising:
-    determining a message class of a communications message; and
-    storing state information generated based on said communications message in a memory portion associated with said determined message class.

32. (Previously Presented) The method according to claim 31, wherein said message class determining step comprises determining said message class based on data found in said communications message.

33. (Previously Presented) The method according to claim 32, further comprising determining whether said state information is to be stored in said memory portion.

34. (Previously Presented) The method according to claim 33, wherein said step of determining whether said state information is to be stored comprises retrieving storage priority information from a look-up list comprising storage command information for said message classes.

35. (Previously Presented) The method according to claim 34, wherein said step of determining whether said state information is to be stored comprises:

-    investigating whether similar state information is already stored in said memory portion; and

-    storing said state information if no similar state information is already stored in said memory portion.

36.   (Previously Presented) The method according to claim 35, wherein said step of determining whether said state information is to be stored comprises:

-    compressing said communications message;

-    calculating a compression factor for said communications message; and

-    determining whether said state information is to be stored in said memory portion based on said compression factor.

37.   (Currently Amended)   A unit for managing a state memory adapted for storing state information applicable in a message communication between communications units in a communications system, comprising:

-    ~~means for defining~~ a message class definer that defines at least two message classes of the messages communicated between said communications units; and

-    ~~means for dividing~~ a state memory divider that divides said state memory into at least two memory portions, each memory portion being assigned for storing state information associated with a specific message class; and

-    in that said ~~defining means~~ message class definer is configured for defining said at least two message classes based on at least one of:

-    a priority type of said communications messages;

-    an application protocol used when generating said communications messages; and

-    a session type associated with communications messages;

-    and in that said state memory is arranged in a first communication unit and is allocated for storing state information used in message communication with a *second* communications unit.

- and in that said second communications unit requesting said first communications unit to allocate state memory space utilized for storing said state information used in said message communication with said second communications unit.

38. (Currently Amended) A communications unit adapted for message communication with at least one external communications unit in a communications system, said communications unit comprising:

- a state memory adapted for storing state information applicable in said message communication; and

- a state memory managing unit that comprises:

- means for defining a message class definer that defines at least two message classes of the messages communicated between said communications unit and said at least one external communications unit; and

- means for dividing a state memory divider that divides said state memory into at least two memory portions, each memory portion being assigned for storing state information associated with a specific message class; and

- in that said defining means message class definer is configured for defining said at least two message classes based on at least one of:

- a priority type of said communications messages;

- an application protocol used when generating said communications messages; and

- a session type associated with communications messages;

- and in that said state memory is allocated for storing state information used in message communication with one of the at least one external communications unit;

- and in that said one external communications unit requesting said state memory managing unit to allocate state memory space utilized for storing said state information used in said message communication with said one external communications unit.

39. (Currently Amended) The unit according to claim 37, wherein said dividing means state memory divider is configured for dividing said state memory into at least two

memory portions based on said message class definition from said ~~defining means~~ message class definer.

40. (Previously Presented) The unit according to claim 37, wherein said managing unit and said state memory are arranged in the first communication unit and said state memory is allocated for storing state information used in message communication with [[a]] the second communications unit.

41. (Canceled)

42. (Previously Presented) The unit according to claim 37, wherein said state information is used during compression and/or decompression of said communications messages.

43. (Previously Presented) The unit according to claim 37, comprising:
- a compressor; and
- a decompressor, wherein said state information is used by at least one of said compressor and said decompressor.

44. (Currently Amended) The unit according to claim 37, wherein said ~~defining means~~ message class definer is configured for defining said at least two message classes based on at least one of:
- a priority type of said communications messages;
- an application protocol used when generating said communications messages; and
- a session type associated with communications messages.

45. (Currently Amended) The unit according to claim 37, wherein said ~~dividing means~~ state memory divider is configured for allocating an equal memory size to said at least two memory portions.

46. (Currently Amended)   The unit according to claim 37, wherein said ~~dividing means~~ state memory divider is configured for allocating a first memory size to a first memory portion and a second different memory size to a second memory portion.

47. (Currently Amended)   The unit according to claim 37, further comprising:

-   ~~means for determining~~ message analyzer that determines a message class of a communications message; and

-   ~~means for storing~~ state storing unit that stores state information generated based on said communications message in a memory portion associated with said determined message class.

48. (Currently Amended)   The unit according to claim 47, wherein said ~~determining means~~ message analyzer is configured for determining said message class based on data found in said communications message.

49. (Currently Amended)   The unit according to claim 47, ~~further comprising means for determining~~ wherein said message analyzer is configured to determine whether said state information is to be stored in said memory portion.

50. (Currently Amended)   The unit according to claim 49, wherein said ~~determining means~~ message analyzer is configured for retrieving storage priority information from an associated look-up list comprising storage command information for said message classes and for generating a storing command based on said storage priority information, said ~~storing means~~ state storing unit being responsive to said storing command.

51. (Currently Amended)   The unit according to claim 49, wherein said ~~determining means~~ message analyzer is configured for investigating whether similar state information is already stored in said memory portion and for generating a storing

command if no similar state information is already stored in said memory portion, said ~~storing means~~ state storing unit being responsive to said storing command.

52.   (Currently Amended)   The unit according to claim 49, wherein said ~~determining means~~ message analyzer is configured for receiving a compression factor obtained during compressing said communications message and for generating a storing command based on said compression factor, said ~~storing means~~ state storing unit being responsive to said storing command.

53. (New)   The method according to claim 1, wherein the state memory is divided before said first communication unit and said second communication unit start transmitting data messages therebetween.

54. (New)   The unit according to claim 37, wherein the state memory is divided before the communication units start transmitting data messages therebetween.

55. (New)   The communications unit according to claim 38, wherein the state memory is divided before data messages are communicated with the one external communications unit.